

The Universal Instructor in all Arts and Sciences :

AND

PENNSYLVANIA GAZETTE.

To be continued Weekly. The 1st of the 3^d Month, 1729.

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A GAIN, when the Earth of the Plant, satiated with its *Acid*, becomes a crystallized Salt; no more of the same *Acid* can be introduc'd into it: whereas the lixivious Salt drawn from the Ashes, does not crystallize, but still greedily imbibes the *Acid* Spirits.

Hence it may be probably concluded, that the Lixivious, or fix'd Alkaly Salt, is no other than the Earth of the Plant, which, notwithstanding the violence of the Fire, has retain'd a little Portion of its *Acid* Salt, sufficient to dissolve it in Water; still reserving a sufficient Number of *Loculi* or Pores, to lodge the first *Acid* that shall offer it self, in lieu of that driven out of it by the Fire. And as the Name *Alkaly* is only given to a Salty in respect of its imbibing and retaining an *Acid* presented to it, in Order to the producing a crystallized Salt; the lixivious Salts of Plants may be said to be more or less Alkaline, as they absorb more or less of the *Acid*, or which amounts to the same, as they contain more or fewer Vacuities to be fill'd with *Acids*.

An Alkaly, after it has been fully satiated with one sort of *Acid*, will yet sometimes admit and retain part of another *Acid*: This is chiefly observed where a Vegetable *Acid* has been received first, and a Fossil one is offer'd after. And it seems owing to this, That the Vegetable *Acid* having undergone a greater Degree of Fermentation in the Body of the Plant, is become rare and pervious, in respect of the more solid and weighty Particles of the Mineral *Acid*, which therefore force a Way in.

The same is always the Case, where an *Acid* appears an Alkaly with respect to another *Acid*; that is, where, of two *Acid* Spirits, one whereof has a Mixture of some Alkaly; the rarer of the two having possess'd the Pores of the Alkaly, is compress'd by the other denser *Acid*. Thus, a Pin-cushion, tho' ever so full of Cotton, will admit a good Number of Pins.

Now urinous Salts are Alkalies as well as the lixivious Kind, i. e. they greedily imbibe *Acids*, retain 'em, and together with 'em compose Salts which crystallize. But their Volatility seems to make it plain, that they are not, like the former, a Composition of a mere earthy Matter, with a little *Acid*; in regard a mere Earth can never become Volatile by such Ad-

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mixture. Yet is there a great deal of Reason to imagine, that their Composition is no other than a Part of the same Matter, which would have produced the lixivious Salt, intimately mix'd with a deal of the fetid Oil of the Plant; and that the Oil is the sole Cause of the Volatility of these Salts.

M. Homberg makes three Classes of *acid* Salts, corresponding to the three Species of Sulphurs wherewith the primitive *Acids* may be combined.

The first Class consists of such as contain an Animal, or a Vegetable Sulphur, which amount nearly to the same. To this Class belong all the distill'd *Acids* of Plants, Fruits, Woods, &c. which must necessarily retain Part of the Oil of the Plant, which is their Sulphur. To this Class also belongs Spirit of Nitre; as being a Substance procur'd from the Excrements of Animals, &c.

The second Class is of those which contain a bituminous Sulphur. Such are Vitriol, common Sulphur and Alumn; which are all usually procur'd from a Mineral Stone, wherein Bitumen is the prevailing Ingredient.

The third is of such as contain a more fix'd Mineral Sulphur, approaching the Nature of a metalline one. Such are the *Acids* drawn from Sea-Salts, and Sal Gemmas; the latter of which is chiefly found in Places near Mines of Metals, and the former probably arises from Rocks, or Veins of Sal Gemma running into the Sea, and there dissolved.

From the peculiar Nature and Properties of the Sulphur thus accompanying the several kinds of *Acid* Salts, their different Phenomena and Effects are to be accounted for.

The *Acids* of Animals are doubtless chiefly derived from Plants, in the ordinary way of Food, and Nutrition; and those of Plants again from those of Minerals. So that there should seem to be but one Spring of *Acidity*: The Diversities arise from what happens to 'em in passing thro' the organis'd Bodies of Plants and Animals. Hence it is that Plants and Animals especially, yield a very volatile and Alkaly Salt; whereas the Salts of Minerals are found altogether *acid*, and much more fix'd and concrete; tho' 'tis the same Matter in both Cases under different assumed Forms.

We

We concluded our last Paper with the Dialogue betwixt the Father and the three Daughters, which ended pretty tartly upon the youngest Daughter, we now go on to inform our Readers, that

Here the Father seeing that the younger Sister began to be a little mov'd, and unwilling they should make a quarrel of it, put an end to the Discourse, and so they soon after withdrew; and then the Father being left with the eldest Daughter only, went on with his Discourse thus to her.

Fa. Child, you are a little too hard upon your Sister.

Da. She should not have taken it so, Sir; she knows it is all but in jest.

Fa. But you do not know, whether it may be all in jest or no.

Da. Nay, Sir, I am sure all our Share in it was in jest; if there is any thing in it, I should have talk'd after another Way.

[Here she was very inquisitive with her Father to know if there was any thing in it or not, at which he only Smil'd.]

Da. Nay, Sir, then I understand how 'tis.

Fa. Well, Child; how will you take it, to see your youngest Sister married before you?

Da. O very well, Sir; I shall be very glad of it, if it be for her good: But if I were to Speak my Mind, I should say something to it about her, that, it may be, there may be Occasion for.

Fa. Well; pray speak your Mind then.

Da. Why, Sir, for all my Sister's bantering her, I must own our youngest Sister will not be easily pleas'd in a Husband, as I times go now.

Fa. How do you mean, Child?

Da. Why, Sir, I mean, that tho' she may be the first of us, that shall be ask'd, she may be the last of us that will be marry'd.

Fa. Ay, my Girl! Is it so with you then! What have you been both making your Bargains without me! And are they so near concluding! That's very hard.

Da. Dear Father, how could you have such a Thought of us! you are quite wrong; you don't understand me at all.

Fa. Nay; How can I understand you any other Way? If it is not so, explain your self.

Da. Sir, I mean, that my Sister will not be easily pleas'd; she will scarce take the first that comes, I dare say.

Fa. No; then I shall take it very ill: For I assure you, he that I mean is a very good one.

Da. Nay, if he is a good one, it may be, she may; but 'tis a question, Sir, whether her good one and your good one may be both of a Sort.

Fa. Why, he has a very good Estate, I'll assure you, far beyond what she can expect.

Da. That's a good thing; but that will go but a little way with her, I know.

Fa. Well; he is a very handsome, well-accomplish'd, well-bred Gentleman; she cannot dislike him: He is a most agreeable young Gentleman, I assure you.

Da. That won't go a bit the farther with her neither, I am sure.

Fa. Then he is in love with her, and has singled her out from you all; she will be the Wife of his Affection to be sure, what can she desire more?

Da. She will desire something more still, Sir, tho' the last is a thing will go very far doubtless; farther than any thing we have talk'd on yet: But you know, Sir, my Sister is a very sober, religious Body, and she will never marry any Man that is not so too; tho' his Estate, his Person, his Accomplishments were beyond all the rest of the World; and this was the Reason, why I said she may be first ask'd, and last marry'd.

Fa. Nay, I can't tell, how Matters are, as to that.

Da. I'll assure you, Sir, she will know how it is as to that, before she engages.

Fa. Nay; let her alone to that Part, that's none of my Business.

[Here he was touch'd a little, and reflected back softly to himself; O why do I say, 'tis none of my Business; whose Business is it, if it is not mine?]

Da. But, Sir, when you know her mind in that Case, it may prevent your receiving any Disappointment, and prevent her venturing to disoblige you, in refusing what you may propose to her.

Fa. No, no; I dare say she won't refuse him; she is not such a Fool neither.

Da. Dear Sir, then I hope you know he is a sober religious Gentleman.

Fa. I know nothing to the contrary, my Dear; I suppose he is.

Da. But, Sir, it makes me anxious about it, because you said just now, you could not tell: I hope you will enquire farther into it before you take any farther Steps about it.

Fa. Why, Child, as to that, I dare say, she need not be concern'd; he is so good a humour'd Man, he will never cross her in small Matters, especially in religious Things. Child, do you think any Gentleman can be angry, that his Wife is sober and religious; to be sure, she may be as religious as she will.

Da. O Dear Sir, my Sister can never be satisfy'd so, sure.

[He observes his Daughter concern'd at it, and that Tears stood in her Eyes.]

Fa. Child! what's the matter? what makes you so concern'd about it?

Da. 'Tis a sad Life, Sir, for a Woman to have no Help from her Husband in Things that are good, but only to have Liberty for herself to be as good as she will, or rather so good as she can: By the same Rule she may be as bad as she will, and it may be, he will like her ne'er the better for one, nor the worse for t'other.

Fa. Well; he is a fine Gentleman, and professes a great Affection for her.

Da. Before he has seen her, it may be, or knows any thing of her.

Fa. No, no; he has seen her, but he has never been in her Company, I know.

Da. So that I find he cares not what she is; he chuses by her outside only.

Fa. He takes all the rest upon Trust.

Da. But my Sister won't take him so, I can tell him that.

Fa. I shall take it very ill from her, if she slights him; for I assure you, he is not to be slighted, he has very near 2000*l.* a year Estate.

Da. But I am sure, if he is not a religious Man, she will slight him for all that; my Meaning is, she will never have him; I suppose she will not be rude to him.

Fa. If she does refuse him, she and I shall quarrel, I assure you, and that very much.

Da. I hope you won't, Sir: You will give her leave to chuse to her own liking; it is for her Life, and she must bear the Discomfort of it; no Body can bear it for her: Besides, Sir, you know she was very religiously instructed by my Mother.

Fa. Ay, ay; your Mother was a good Woman.

Da. And you know, Sir, I suppose, what Advice my Mother gave upon her Death-bed, viz. Never to marry a Man that was not religious, whatever other Advantages might offer with him.

Fa. And did she not give you the same Advice too, my Dear?

Da. Yes, to be sure, and all of us.

Fa. Well; and yet you heard what your Sister said just now, viz. That she would not trouble herself about it, so there was but a good Estate.

Da. But I hope my Sister would consider better, if she came to the Question.

Fa. Why, Child, would you refuse such a Gentleman, and such a Settlement as this is, that offers now to your Sisters, for such a Nicety as that?

Da. It will be time enough, Sir, for me to answer that Question, when I am offer'd such a one; there's no Danger of me yet.

Fa. I hope you would be wiser.

Da. I hope, Sir, I should act as becomes me: But the Case is not not mine now; if it was, I should not have begun the Discourse.

Fa. Well; but did your Mother give you such Advice, Child, when she was ill?

Da. Yes, Sir; and more than Advice: For she told us, she would leave it as an Injunction upon us, as far as her dying Words could have any Influence to oblige us.

Fa. Very well: that was as much as to say, she had found the Inconvenience of it herself.

[Here his Conscience touch'd him again, tho' but slightly, and he fetch'd a Sigh, and said softly, If she did, it was nothing but what she had too much Reason to do; for

for the liv'd but an uncomfortable Life with me on that very Account.]

Da. Nay, indeed, *Dear Father*, we never put any such Construction upon it.

Fa. And so, my *Dear*, you think your Sister will not like this Gentleman, do you?

Da. Indeed, Sir, *I cannot tell*, till I know what kind of a Gentleman he is; no, *nor then neither*; for how can I tell what my Sister will like, or how her Fancy may lead her to Act against her Judgment, if she should like him very well upon seeing him?

Fa. But you believe she won't.

Da. If he is not a very sober religious Man, I do think she won't; if she does, she must break in upon the most solemn Resolutions, that she is able to make.

Fa. Why, will nothing serve her but a Saint? alas! where does she think to find him? What! would she marry a Bishop?

Da. Nay, Sir, if she should, she is not sure, she should not be disappointed; Ministers are but Men.

Fa. No indeed, Child; nor always the best of Men neither.

Da. But, Sir, where there is a Profession of Religion, there is some Likelihood of finding the Truth of it; but where there is no Profession, there it cannot be. Now tho' we are not obliged to be sure our Husbands should be Saints, yet I believe we ought to be satisfied, that they are not Atheists: there's a great deal of difference, Sir, between a Friend to Religion, and an Enemy.

Fa. Well, well; the Girls of this Age do not much trouble their selves about Religion; they generally let it alone, till they see what Religion their Husbands are of.

Da. *Dear Father*, I hope your Girls are not of that Sort.

Fa. My Daughters are like other Folks Daughters, I believe, I hope they are not worse.

Da. But, Sir, if that were true, then there would still be the more Reason to take care that they should marry religious Husbands, else they would have no Religion at all.

Fa. But how shall you know it?

Da. We must endeavour to be satisfy'd as well as we can; if we are deceiv'd, it may be our Unhappiness, but will not be our Fault; but if we neglect the Caution, it may be a double Misery, by its being our Sorrow and our Sin too.

Fa. Well, Child, I hope this Gentleman will please your Sister, as well as he does me; and I would not have her stand in her own Light; if he is not so religious now, it may come a terwards; the Man is a sober well bred ingenious Gentleman.

Da. I can say nothing to it, Sir, unless I knew him, I only take notice of the Principle, Sir, on which my Sister goes, and by which I am sure she will act in this Matter, that you may not be disappointed, and resent it; for I know she will not go from it.

Fa. I'll warrant you: I intend to talk with her about it; I don't doubt but she will like him very well.

To be continued in our Next.

FOREIGN AFFAIRS.

Rome, January 22. N. S. They write from Mantua, that the Lands of that Dutchy are overflowed for 60 Miles in Circumference; so that no Harvest is to be expected from them this Year: And as all the States of Italy undergo the same Calamity in a greater or less Degree, Publick Prayers are put up in all the Churches, for Weather more favourable to the Fruits of the Earth. We have Advice from Turin, that the Small Pox has made such Havock there for these three Months past, that the King of Sardinia and the Prince of Piedmont are retired to La Venerie to avoid the Effects of that fatal Dissemper.

Frankfort, Feb. 6. N. S. All the Rivers hereabout, both great and small, have drowned their Banks, and made several Places look as if they were floating in the Sea: and from Manheim they write, that they see nothing but Water for five Miles round.

Vienna Jan. 12. The last Advices this Court has received from Spain import, as we are told, that the King of Spain has declared, that he will not come into any Accommodation, till his Pretensions to Gibraltar and Port Mahon are decided in the Congress, agreeable to the Promises he pretends to have been made to him in that respect, at the time of Signing the Preliminary Articles.

Paris Feb. 12. N. S. On the 31st ult. the Butchers of Versailles, with Trumpets, Kettle Drums, and Haut-boys at their Head, drove a fat Ox before the King's Windows, because the Court designs to pass the Carnival at Marli. The King gave them 10 Louis d'ors, and the Queen 6. They had a Swifess and a Runner. The young Butchers were dress'd like Larks, and the King's Butcher in a Roman Habit was astride the Ox. There was one Butcher dress'd like a Cardinal, and another like a Gentleman of the Law, each carrying a Christmas Box, with which they went to all the Ministers, and collected 600 Livres; and then they had a Ball that cost them more Money.

Genoa, Dec. 21. N. S. By the Return of a Merchant Ship of this Place from Lisbon, we have Advice, that the King of Portugal had threaten'd the Patriarch of that City to seize his Person, if he proceeds to incense the Clergy against his Majesty's Conduct with regard to the See of Rome, or if he publishes any thing without the previous Approbation of the Ministry. The Preachers appointed by that Prelate to preach in several Churches in Lisbon, have likewise been given to understand, that if they utter any thing disrespectful to his Majesty, they shall be sent to the Colonies of America. Moreover, the Decree lately issued by the King and Council, for restraining the too great Authority of the Tribunal of the Inquisition, is executed with the utmost Rigour: No Person accused is hurry'd away directly before that Tribunal, but is attended by a Counsellor to make his Defence, if he is not capable of doing it himself; and the Secretary is obliged to write down the Answer to every Interrogatory, and to read them over to him, before he signs them, which was never practised before with the like Exactness. The Italian Church at Lisbon was shut up till the People of that Nation were gone; and the Portuguese Priests of the King's Appointment have since officiated in it; but the Nuncio's Canopy and Easy Chair were first taken out of the Choir by his Majesty's Order; and most of the Portuguese Bankers that held a Correspondence at Rome, have suspended the same, for fear of incurring the King's Displeasure.

Lisbon, Jan. 5. The Differences between this Court and that of Rome increase daily. The Effects of the Portuguese settled at Rome, who did not quit that City as soon as they had Notice of the King's Orders, have been confiscated; and some Italian Musicians have been put under Arrest. The Tribunal of the Inquisition have caused several Jews and others to be arrested, but have begun to proceed against them, because of the Forms prescribed by the King's late Ordinance.

Amsterdam, Feb. 11. We learn from Lisbon, that the King of Portugal had set at Liberty divers Persons taken up by the Inquisition; that his Majesty had ordered the Grand Inquisitor to suspend the Functions of his Office, till he had named Commissaries to examine jointly with him the Processes against such Persons as are accused; and that he had appointed some of the most celebrated Advocates of Lisbon to defend the Cause of the pretended Criminals.

London Feb. 11. We hear, that Yesterday complaint was made to the Court of Lord-Mayor and Aldermen, that the Price of Coals was considerably advanced, occasioned by a Combination of the Coal Owners and others at Newcastle; and that, if not timely prevented, the same must advance the Price of Coals to so high a Degree, that will prove not only the greatest Oppression to the Poor, but also an Impostion on the Publick of this City, if such Combination takes Effect; no Coals being to be imported from Newcastle to the Port of London, till some time in March next: Which seeming to the Court to be a Matter of the highest Consequence, we are told application will be made in the most effectual way to the High Court of Parliament, to put a stop to that pernicious Practice.

London Feb. 12. We have received an Account from Woolwich of a large new Ship of 800 Tons Burthen, (lately launched in the River) being manned with Frenchmen, makes it suspected that she is design'd for the Spaniards; that the Thoughts of this disturbs the honest shipwrights there, the Spaniards having within a short Time past received at Cadiz 4 fine large Ships

Ships, which were built for them in this River.

This Day *William Hales*, formerly mentioned for counterfeiting Goldsmiths Notes, stood in the Pillory, at the Royal Exchange, pursuant to his Sentence at the Old Bailey.

Likewise *Mr. Kinnerly* a Clergyman stood in the Pillory at the same Time, whose Case seem'd very hard, altho' he was guilty of great Imprudence in discovering some dark Practices of a late Earl, which were deliver'd him by a sick Man, under the Seal of Confession.

London, Feb. 15. By the Diamond, Capt. Rowe, which is arriv'd in Dove-Road in 29 Days from Santa Cruz in South Barbary, we have Advice, that the City of Fez had been surrendr'd to Muly Hamet Deby, and that his Brother Muley Abdelmeleck was delivered into his Hands, and by him kept close confined at Mequinez.

By Advice from Cadiz, dated the 8th Instant, N. S. we learn, that the Court of Spain was arriv'd at Seville, and expected at Cadiz in 2 or 3 Days.

Feb. 22. Col. Lilly is gone in the Seaford Man of War to the West-Indies, and is to have the Direction of building a Fort on a Point of Land in South Carolina, which commands the Gulph of Florida.

They write from Portsmouth, that 6 Men of War in that Harbour are fitting out with all Expedition for the West-Indies, and that 9 of the Guard Ships are already mann'd to their highest Compliment, and the other 6 want but very few.

Feb. 25. We hear the Colonels, Groves, Murry and Olway are ordered to hold themselves in Readiness to go to their respective Regiments upon some Expedition as yet unknown, and are the only Regiments that are to hold themselves in Readiness for such Expedition.

March 1. This being the Anniversary of the Queen's Birth Day, who then enter'd into the 40th Year of her Age, the same was observed with all possible Demonstrations of Joy at Court and throughout this City and Suburbs. The Society of ancient Britons went to St. Clement's Church, and heard a sermon preach'd, and afterwards went in Procession to Dine at Merchant-Taylors Hall, preceded by their Charity Children; the Stewards having Plumes of Feathers on their Hats.

The Duke of Newcastle treated great Numbers of the Nobility, and the Lord Viscount Townshend, the Foreign Ministers, in Honour of the Day.

Boston, April 21. On Friday last his Excellency Governor Burnet, after having made a Speech to the Great and General Court of Assembly at Salem, was pleas'd to dissolve them. And in the Afternoon set out for his Government of New-Hampshire.

PHILADELPHIA: Printed by Samuel Keimer, where Subscriptions are taken in for this Paper, at Ten Shillings a Year, and Advertisements inserted at Three Shillings each.

Philadelphia. We hear that one of the *Shallops* going down to Salem-Fair sprung a Leak in the River, and the Goods very much damaged.

Philadelphia, May 1. Entred Inwards.

Snow Endeavour, *W. Roper* from *Newcastle*.
Sloop Samuel, *Ashbury Sutton*, from *Annapolis*.
Sloop Salisbury, *Thomas Pendry* from *Bristol*.
Sloop John and Elizabeth, *Sam. Hopkins* from *Maryland*.
Snow Rich. & Sarah, *Nich. Garland*, from *Jamaica*.
---Dove, *William Harris*, from *Boston*.
Ship Princess, *Thomas Lloyd*, from *Madera*.

Entred outwards.

Sloop Eliz. & Ann, *William Burroughs*, to *Jamaica*.
Ship Samuel & Ann, *Thomas Glentworth*, to *Madera*.
Sloop Adventure, *Robert Rawle*, to *Surinam*.
---Rose, *Benjamin Butterfield*, to *Jamaica*.

Cleared.

Sloop Endeavour, *Francis Gottier*, to *Salem*.
Schooner Dolphin, *Henry Stites*, to *Capemay*.
Brig. Eliz. & Ann, *Samuel Lobdell* to *St. Christophers*.
---Amity, *Mark Whedn*, to *Antigua*.
Sloop William, *Jame Dickenson* to *St. Christophers*.

A D V E R T I S E M E N T S.

A Lusty young Man and Woman Servants: The Man having four Years to serve, the woman five and a quarter, a very good Flat, and sundry other Things to be sold reasonable, by *Richard Mullington* in *Water-street*.

A House and Ferry to be Let, on the River of *Deaware*, above the Falls, commonly call'd *Heath's* ferry, with an Orchard adjoining, and Conveniency for getting Fire-Wood. Enquire of *James Gould*, Attorney, or *Francis Bowes*, Esq; at *Trentown*, for the Terms.

To be sold,

A Good Plantation on *Brandywine* Creek in *Chester* County, lately belonging to *Joseph Cloud*, containing 225 Acres, with a House, good Barn, Orchard; and between 40 and 50 Acres clear'd, the said Land being well situated for Meadow running about 300 Perches on the said Creek, about 30 Miles from *Philadelphia*, enquire of *Edward Herne* of *Philadelphia* aforesaid.

R UN away from *John Bentley* of *Birmingham*, and *Richard Clayton* of *Concord*, both of the same County, two Servant-Men, the one named *John Gray*, an Englishman, of a short Stature, dark Complexion, short curl'd Hair, a Mole upon his right Cheek: He had on when he went away, a good Felt Hat, a blue Jacket with a Cinnamon-colour'd Jacket under it, grey stockings, good Shoes. The other named *Richard Middleton*, an Englishman, of a short Stature, pale Complexion, straight Hair, a good Felt Hat, a light colour'd Coat, Leather Breeches, yellow Stockings, good Shoes. Whoever secures the said Servants, in the next Coal, and gives Notice to their Masters, so that they may have 'em again, shall have Fifty Shillings Reward, and reasonable Charges paid by us,
John Bentley,
Richard Clayton.

From the *Friendly Office* for selling all sorts of Goods cheap.

1. Two New Frying Pans.
2. Six Pair of H L Hinges.
3. Seven Fire Shovel-Pans.
4. A Parcel of Pewter.
5. A Greek and English Lexicon, a great Curiosity, explaining every Word in the New Testament.
6. Switch for the snake in the Grass.
7. Monsieur Perier's General History of Voyages and Travels.
8. Capt. John Stevens's Spanish Rule of Trade to the West-Indies.
9. A Clock, that goes well, to be sold upon Credit.